Technical Page

This proposal has not been submitted before.

Proposal Type: Urgent
General Category: Planetary Radar
Observation Category:
Total Time Requested: 3 Hours
Minimum Useful Time:

Proposal Title: Radar Observation of Recently Discovered Near-Earth Object 2020 MK

ABSTRACT:

We request one 2.5-hour observing track (including transmitter warm-up time) on June 25th to observe the recently discovered near-Earth object (NEO) 2020 MK. The closest approach will be on June 27th at a distance of 0.03 au. The estimated diameter is 100 meters. NEOs are high priorities of the NASA funded Planetary Radar Science group at the Arecibo Observatory (AO), and each year about 50 to 70 newly discovered NEOs are observed using the planetary radar system at AO. Usually not much is known about recently discovered NEOs, except for their orbital parameters. Radar observations allow to refine its orbit, helping us not to lose the object. In addition, radar also allows us to estimate its size, rotation state, and surface properties.

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>E-mail</th>
<th>Phone</th>
<th>Student</th>
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</thead>
<tbody>
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Remote Observing Request

- Observer will travel to AO
- Remote Observing
- In Absentia (instructions to operator)

Instrument Setup

S-band receiver

Atmospheric Observation Instruments:

Special Equipment or setup: none

RFI Considerations
Frequency Ranges Planned